This listing of claims will replace all prior versions, and listings, of claims in the above-identified allowed application:

Listing of Claims:

- 1. Canceled
- 2. (Previously Presented) A method of achieving an effect in a patient in need thereof comprising administering an effective amount of a vitamin D compound which is a 24-hydroxyvitamin D compound wherein the effect is treating hyperparathyroidism, and wherein said 24-hydroxyvitamin D is a compound of formula (I):

wherein Z is a side chain of formula (IIB):

$$R^3$$
 R^5
 R^6
 R^1
(IIIB)

wherein R⁵ and R⁶ are each hydrogen or taken together form a double bond between C-22 and C-23, R³ is hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; R⁴ is lower alkyl, lower fluoroalkyl, lower fluoroalkenyl; and R¹ and R² are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl, lower fluoroalkenyl, lower fluoroalkyl, lower fluor

cyclocarbon ring; Y is a methylene group if Y is double bonded to the A-ring or a methyl group or hydrogen if Y is single bonded; and X is hydrogen, lower alkyl or lower fluoroalkyl.

3. (Previously Presented) A method of achieving an effect in a patient in need thereof comprising administering an effective amount of a vitamin D compound which is a 24-hydroxyprevitamin D, wherein the effect is hyperparathyroidism, wherein said 24-hydroxyprevitamin D is a compound of formula (III):

$$R^3$$
 R^5
 R^6
 R^1
 R^2
 R^2
 R^3
 R^5
 R^6
 R^1
 R^2

$$\mathbb{R}^3$$
 \mathbb{R}^7
 \mathbb{R}^7
 \mathbb{R}^7
 \mathbb{R}^9
 \mathbb{R}^{10}

wherein R^5 and R^6 are each hydrogen or taken together form a double bond between C-22 and C-23, R^3 , R^9 and R^{10} are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; R^4 and R^7 are independently lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; and R^1 and R^2 are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl, lower fluoroalkyl, lower cycloalkyl or taken together with the carbon to which they are bonded form a C_3 - C_8 cyclocarbon ring; Y is a methyl group or hydrogen; and X is hydrogen, lower alkyl or lower fluoroalkyl.

4-10. Canceled

11. (Currently Amended) A method of achieving an effect in a patient in need thereof comprising administering an effective amount of a vitamin D compound which is a 24-hydroxyvitamin D, wherein the effect is hyperparathyroidism lowering or maintaining lowered parathyroid hormone levels, and wherein the 24-hydroxyvitamin D is a compound of formula (I):

$$R^3$$
 R^5
 R^6
 R^2
(IIB)

$$\mathbb{R}^3$$
 \mathbb{R}^9
 \mathbb{R}^{10}
(IID)

wherein R⁵ and R⁶ are each hydrogen or taken together form a double bond between C-22 and C-23, R³, R⁹ and R¹⁰ are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; R⁴ and R⁷ are independently lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; and R¹ and R² are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl, lower cycloalkyl or taken together with the carbon to which they are bonded form a C₃-C₈ cyclocarbon ring; Y is a methylene group if Y is double bonded to the A-ring or a methyl group or hydrogen if Y is single bonded; and X is hydrogen, lower alkyl or lower fluoroalkyl.

12. Canceled

13. (Currently Amended) A method of achieving an effect in a patient comprising administering an effective amount of a vitamin D compound which is a 24-hydroxyprevitamin D wherein the effect is hyperparathyroidism lowering or maintaining lowered parathyroid hormone levels, wherein said 24-hydroxyprevitamin D is a compound of formula (III):

$$R^3$$
 R^5
 R^6
 R^1
(IIB)

$$\mathbb{R}^3$$
 \mathbb{R}^4
 \mathbb{R}^7
 \mathbb{R}^7
 \mathbb{R}^9
 \mathbb{R}^{10}

wherein R^5 and R^6 are each hydrogen or taken together form a double bond between C-22 and C-23, R^3 , R^9 and R^{10} are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; R^4 and R^7 are independently lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; and R^1 and R^2 are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl, lower fluoroalkyl, lower cycloalkyl or taken together with the carbon to which they are bonded form a C_3 - C_8 cyclocarbon ring; Y is a methyl group or hydrogen; and X is hydrogen, lower alkyl or lower fluoroalkyl.

14. (Previously Presented) A method of treating a human in need thereof to alleviate the pathological effects of hyperparathyroidism wherein the method comprises administering to the human in need thereof a vitamin D compound which is a 24-hydroxyvitamin D of formula (I) wherein said compound is administered to the human in need thereof in an amount sufficient to lower elevated or maintain lowered parathyroid hormone level in the human in need therof; wherein formula (I) is:

$$R^3$$
 R^5
 R^6
 R^6
 R^1
(IIB)

$$\mathbb{R}^3$$
 (IIII)

wherein R⁵ and R⁶ are each hydrogen or taken together form a double bond between C-22 and C-23, R³, R⁹ and R¹⁰ are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; R⁴ and R⁷ are independently lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; and R¹ and R² are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl, lower fluoroalkyl, lower cycloalkyl or taken together with the carbon to which they are bonded form a C₃-C₈ cyclocarbon ring; Y is a methylene group if Y is double bonded to the A-ring or a methyl group or hydrogen if Y is single bonded; and X is hydrogen, lower alkyl or lower fluoroalkyl.

15-16. Cancelled

- 17. (Previously Presented) The method of claim 2, wherein said 24-hydroxyvitamin D compound is administered in a dosage of about 3.5 μ g to about 1000 μ g/week.
- 18.-28. Cancelled
- 29. (Previously Presented) The method of claim 3 wherein Z is a side chain of formula (IIB).
- 30. (Previously Presented) The method of claim 29, wherein said 24-hydroxyprevitamin D is 24-hydroxyprevitamin D₂; 24(S)-hydroxyprevitamin D₂; 24-hydroxyprevitamin D₄; or 24(R)-hydroxyprevitamin D₄.
- 31. Cancelled
- 32. (Previously Presented) The method of claim 3 wherein Z is a side chain of formula (IID).
- 33. Cancelled
- 34. (Previously Presented) The method of claim 32 wherein said 24-hydroxyprevitamin D compound is 24-OH-25-ene-preD₂.
- 35.-38. Cancelled.
- 39. (Previously Presented) The method of claim 2, wherein the effect is treating hyperparathyroidism.
- 40.-42. Cancelled

- 43. (Previously Presented) The method of claim 2, wherein the vitamin D compound is 24-hydroxy-19-nor-vitamin D.
- 44. (Previously Presented) The method of claim 2, wherein the vitamin D compound is 24-hydroxyvitamin D₂.
- 45. Cancelled
- 46. (Previously Presented) The method of claim 3, wherein the effect is treating hyperparathyroidism.
- 47.-50. Cancelled
- 51. (Presented) The method of claim 3, wherein the vitamin D compound is 24-hydroxyprevitamin D₂.
- 52.-53. Cancelled
- 54. (Previously Presented) The method of claim 11 wherein the effect is lowering or maintaining lowered parathyroid hormone level.
- 55.-57. Cancelled
- 58. (Previously Presented) The method of claim 11, wherein the vitamin D compound is 24-hydroxy-19-nor-vitamin D.
- 59. (Previously Presented) The method of claim 11, wherein the vitamin D compound is 24-hydroxyvitamin D₂.
- 60.-61. Cancelled.

- 62. (Previously Presented) The method of claim 13 wherein the effect is lowering or maintaining lowered parathyroid hormone level.
- 63.-67. Previously Cancelled
- 68. (Previously Presented) The method of claim 13, wherein the vitamin D compound is 24-hydroxyprevitamin D₂.
- 69. Cancelled
- 70. (Previously Presented) The method of claim 14 wherein the method of treatment alleviates the pathological effects of hyperparathyroidism.
- 71. 79. Cancelled
- 80. (Previously Presented) The method of claim 14 wherein the vitamin D compound is administered to the human in an amount sufficient to lower or maintain lowered parathyroid hormone level.
- 81.-84. Cancelled
- 85. (Previously Presented) The method of claim 14, wherein the vitamin D compound is 24-hydroxy-19-nor-vitamin D.
- 86. (Previously Presented) The method of claim 14, wherein the vitamin D compound is 24-hydroxyvitamin D₂.
- 87. (Previously Presented) The method of claim 14 wherein the Z side chain is formula IIB.

- 88. (Previously Presented) The method of claim 87, wherein said 24-hydroxyvitamin D is 24-hydroxyvitamin D₂; 24(S)-hydroxyvitamin D₂; 24-hydroxyvitamin D₄; 24(R)-hydroxyvitamin D₄.
- 89. (Previously Presented) The method of claim 14 wherein the Z side chain is formula IID.
- 90. (Previously Presented) The method of claim 14 wherein the Z side chain is formula IIF.
- 91. (Previously Presented) A method of treating a human in need thereof to alleviate the pathological effects hyperparathyroidism, wherein the method comprises administering to the human in need thereof a vitamin D compound which is a 24-hydroxyprevitamin D of formula (III), wherein said compound is administered to the human in need thereof in an amount sufficient lower elevated or maintain lowered parathyroid hormone level, wherein formula (III) is:

$$R^3$$
 R^5
 R^6
 R^1
(IIB)

$$\mathbb{R}^{4}$$
 OH \mathbb{R}^{7} (IID)

wherein R^5 and R^6 are each hydrogen or taken together form a double bond between C-22 and C-23, R^3 , R^9 and R^{10} are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; R^4 and R^7 are independently lower alkyl, lower fluoroalkyl, lower alkenyl or lower fluoroalkenyl; and R^1 and R^2 are independently hydrogen, lower alkyl, lower fluoroalkyl, lower alkenyl, lower fluoroalkyl, lower cycloalkyl or taken together with the carbon to which they are bonded form a C_3 - C_8 cyclocarbon ring; Y is a methyl group or hydrogen; and X is hydrogen, lower alkyl or lower fluoroalkyl.

92. Cancelled.

93. (Previously Presented) The method of claim 91 wherein the method of treatment alleviates the pathological effects of hyperparathyroidism.

- 94.-99. Cancelled.
- 100. (Previously Presented) The method of claim 91 wherein the Z side chain is formula IIB.
- 101. (Previously Presented) The method of claim 91, wherein said 24-hydroxyprevitamin D is 24-hydroxyprevitamin D_2 ; 24(S)-hydroxyprevitamin D_2 ; 24(R)-hydroxyprevitamin D_4 .
- 102. (Previously Presented) The method of claim 101, wherein the vitamin D compound is 24-hydroxy previtamin D₂.
- 103. (Previously Presented) The method of claim 91 wherein the Z side chain is formula IID.
- 104. (Previously Presented) The method of claim 91 wherein the Z side chain is formula IIF.